

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1. (Currently Amended) Blanks for a halftone phase shifting photomask having each having a halftone phase shifting film containing at least chromium and fluorine on a transparent substrate, characterized in that the halftone phase shifting film is heat-treated at a temperature between 250°C and 500°C so that a change of the optical property of the halftone phase shifting film produced by the application of excimer laser for exposure to the halftone phase shifting film is decreased.

2. (Currently Amended) Blanks for a halftone phase shifting photomask having each having a halftone phase shifting film containing at least chromium and fluorine on a transparent substrate, characterized in that the halftone phase shifting film is heat-treated at a temperature between 250°C and 500°C, and that the heat-treated surface of the halftone phase shifting film is removed by etching the surface thereof so that a change of the optical property of the halftone phase shifting film produced by the application of excimer laser for exposure to the halftone phase shifting film is decreased and a change of the transmittance thereof is increased.

3. (Currently Amended) Blanks for a halftone phase shifting photomask having each having a halftone phase shifting film containing at least chromium and fluorine on a transparent substrate, characterized in that the halftone phase shifting film is heat-treated at a temperature between

250°C and 500°C, and that the heat-treated surface of the halftone phase shifting film is removed by etching the surface and thereafter a protective film is provided on the halftone phase shifting film so that a change of the optical property of the halftone phase shifting film produced by the application of excimer laser for exposure to the halftone phase shifting film is decreased and a change of the transmittance thereof is increased.

4. (Currently Amended) Blanks for a halftone phase shifting photomask having each having a halftone phase shifting film containing at least chromium and fluorine on a transparent substrate, characterized in that a protective film is provided on the halftone phase shifting film, that thereafter the halftone phase shifting film having the protective film is heat-treated at a temperature between 250°C and 500°C, and that thereafter the surface of the halftone phase shifting film is removed by etching the surface so that a change of the optical property of the halftone phase shifting film produced by the application of excimer laser for exposure to the halftone phase shifting film is decreased.

5. (Currently Amended) Blanks for a halftone phase shifting photomask having each having a halftone phase shifting film containing at least chromium and fluorine on a transparent substrate, characterized in that a protective film is provided on the halftone phase shifting film, and that thereafter the halftone phase shifting film having the protective film is heat-treated at a temperature between 250°C and 500°C so that a change of the optical property of the halftone phase shifting film produced by the application of excimer laser for exposure to the halftone phase shifting film is decreased, and a change of the transmittance thereof is increased.

6. (Currently Amended) Blanks for a halftone phase shifting photomask having each having a halftone phase shifting film containing at least chromium and fluorine on a transparent substrate as claimed in any of claims 1 to 5, wherein the heat-treated surface of the halftone phase shifting film contains at least chromium and the amount of fluorine contained in the surface is lesserless than that contained in the inside of the halftone phase shifting film.

7. (Currently Amended) Blanks for a halftone phase shifting photomask having each having a halftone phase shifting film containing at least chromium and fluorine on a transparent substrate as claimed in any of claims 3 to 5, wherein the protective film contains at least chromium and the amount of fluorine contained in the protective film is lesserless than that contained in the halftone phase shifting film.

8. (Currently Amended) Blanks for a halftone phase shifting photomask having each having a halftone phase shifting film containing at least chromium and fluorine on a transparent substrate as claimed in any of claims 1 to 5, wherein the halftone phase shifting film comprises a plurality of layers with an interface defined in the inside of the halftone shifting film between said layers and the interface existing in the inside disappears through the heat-treatment.

9. (Currently Amended) HalftoneA halftone phase shifting photomask produced by using the blanks for a halftone phase shifting photomask as claimed in any of claims 1 to 85, characterized in that the halftone phase shifting film is formed into a pattern,pattern after the above-mentioned heat treatment has been made.

10. (Currently Amended) ~~HalftoneA~~ halftone phase shifting photomask having a halftone phase shifting film containing at least chromium and fluorine on a transparent substrate, characterized in that the halftone phase shifting film is heat-treated at a temperature between 250°C and 500°C, that the heat-treated halftone phase shifting film is formed into a pattern, and that a protective film is formed on the formed halftone phase shifting film, so that a change of the optical property produced by the application of excimer laser for exposure to the halftone phase shifting film is decreased.

11. (Currently Amended) ~~HalftoneA~~ halftone phase shifting photomask having a halftone phase shifting film containing at least chromium and fluorine on a transparent substrate, characterized in that the halftone phase shifting film is heat-treated at a temperature between 250°C and 500°C, that the surface of the heat-treated halftone phase shifting film is removed by etching the surface, that the halftone phase shifting film is then formed into a pattern and that a protective film is formed on the formed halftone phase shifting film, so that a change of the optical property produced by the application of excimer laser for exposure to the halftone phase shifting film is decreased and a change of the transmittance of the halftone phase shifting film is increased.

12. (Currently Amended) ~~HalftoneA~~ halftone phase shifting photomask having a halftone phase shifting film containing at least chromium and fluorine on a transparent substrate, characterized in that the halftone phase shifting film is then formed into a pattern through pattern exposure and that thereafter, the halftone phase shifting film is heat-treated at a temperature between 250°C and 500°C, so that a

change of the optical property of the halftone phase shifting film produced by the application of excimer laser for exposure to the film is decreased.

13. (Currently Amended) Halftone A halftone phase shifting photomask having a halftone phase shifting film containing at least chromium and fluorine on a transparent substrate, characterized in that the halftone phase shifting film is formed into a pattern through pattern exposure, the surface of the halftone phase shifting film is heat-treated at a temperature between 250°C and 500°C and that the surface of the heat-treated film is removed by etching the surface so that a change of the optical property of the halftone phase shifting film caused by excimer laser for exposure applied to the film is decreased.

14. (Currently Amended) Halftone A halftone phase shifting photomask having a halftone phase shifting film containing at least chromium and fluorine on a transparent substrate, characterized in that the halftone phase shifting film is formed into a pattern through pattern exposure, that the surface of the halftone phase shifting film is heat-treated at a temperature between 250°C and 500°C, that the surface of the heat-treated film is removed by etching the surface and that a protective film is then formed on the halftone phase shifting film so that a change of the optical property produced by excimer laser for exposure applied to the film is decreased and a change of the transmittance of the halftone phase shifting film is increased.

15. (Currently Amended) Halftone The halftone phase shifting photomask as claimed in any of claims 10, 11, 14 characterized in that the protective film contains at least chromium, and the amount of fluorine contained in the

protective film is lesser less than that contained in the halftone phase shifting film.

16. (Currently Amended) ~~Halftone~~The halftone phase shifting photomask as claimed in any of claims 10, 11, 14 characterized in that the protective film is a transparent film.

17. (Currently Amended) ~~Halftone~~The halftone phase shifting photomask as claimed in any of claims 10 to 14 characterized in that the halftone phase shifting film comprises a plurality of layers with an interface defined in the inside of the halftone shifting film between said layers and the interface existing in the inside of the halftone phase shifting film disappears.

18. (Currently Amended) ~~Halftone~~The halftone phase shifting photomask as claimed in any of claims 10, 11, 14 to 16 and 14 characterized in that a pattern size of the pattern is made lesser than that of objeetedan objectionable size, when the halftone phase shifting film is formed into at the pattern through the pattern exposure.

19. (Currently Amended) A method of forming a pattern characterized in that the halftone phase shifting photomask as claimed in any of claims 9 to 1810 to 14 is used.